

1       2.     The method of claim 1, wherein the defect calibration scan data is performed  
2     on the occurrence of at least one of the group of events comprising when the image  
3     scanning device is powered up, upon request by a user, and periodically.

1       3.     The method of claim 1, further comprising storing the tag.

1       4.     The method of claim 3, further comprising repeating the steps of performing  
2     the defect calibration scanning, analyzing defect calibration scan data to detect for a  
3     new defect and a change in any previously detected defect, generating and storing a  
4     tag for each new detected defect, and updating the stored tag for each previously  
5     detected defect that has changed.

1       5.     The method of claim 1, further comprising automatically compensating for the  
2     defect based on information contained within the tag.

1       6.     The method of claim 1, further comprising determining the nature of the  
2     defect by recursively dividing the section of the image scanning area tagged as having  
3     a defect into subareas and analyzing each subarea in detail.

1       7.     The method of claim 1, further comprising determining whether the section of  
2     the image scanning area tagged as having a defect is included in a target image region.

1       8.     The method of claim 7, further comprising ignoring the section of the image  
2     scanning area tagged as having a defect if that section is determined not to be  
3     included in the target image region.

1       9.     The method of claim 8, wherein the section of the image scanning area tagged  
2     as having a defect is ignored in autofitting the target image to the image scanning  
3     area.

1       10.    The method of claim 8, wherein the section of the image scanning area tagged  
2     as having a defect is ignored in cloning the target image to produce multiple target  
3     images over the image scanning area.

1       11.     The method of claim 8, wherein the section of the image scanning area tagged  
2     as having a defect is ignored in enlarging the target image to fit across multiple image  
3     scanning areas.

1       12.     The method of claim 7, further comprising smoothing over the section of the  
2     image scanning area tagged as having a defect if that section is determined to be  
3     included in the target image region.

1       13.     The method of claim 1, wherein the defect calibration scan is a low resolution  
2     scan.

1       14.     An apparatus for automatically detecting defects in an image scanning device,  
2     comprising:

3              an analyzer for analyzing data produced from a defect calibration scan of an  
4     image scanning area by the image scanning device to detect at least one defect in at  
5     least one section of the image scanning area; and

6              a tag generator for generating a tag for each section of the image scanning area  
7     in which the defect is detected.

1       15.     The apparatus of claim 14, wherein the defect calibration scan data is  
2     performed on the occurrence of one of the group of events comprising when the  
3     image scanning device is powered up, upon request by a user, and periodically.

1       16.     The apparatus of claim 14, further comprising a memory for storing the tag.

1       17.     The apparatus of claim 16, wherein the defect calibration scan is repeatedly  
2     produced, the analyzer for each repeated scan analyses the calibration scan data to  
3     detects a new defect and to detect a change in any previously detected defect, and the  
4     tag generator generates a tag for each new defect and updates the tag for each  
5     previously detected defect that has changed, and wherein the new tags and updated  
6     tags are stored in the memory .

1       18.     The apparatus of claim 14, further comprising a compensator for  
2     compensating for the defect based on information contained within the tag.

- 1    19.    The apparatus of claim 14, further comprising means for determining the  
2    nature of the defect by recursively dividing the section of the image scanning area  
3    tagged as having a defect into subareas and analyzing each subarea in detail.
- 1    20.    The apparatus of claim 14, further comprising means for determining whether  
2    the section of the image scanning area tagged as having a defect is included in a target  
3    image region.
- 1    21.    The apparatus of claim 20, further comprising means for ignoring the section  
2    of the image scanning area tagged as having a defect if that section is determined not  
3    to be included in the target image region.
- 1    22.    The apparatus of claim 21, wherein the section of the image scanning area  
2    tagged as having a defect is ignored in autofitting the target image to the image  
3    scanning area.
- 1    23.    The apparatus of claim 21, wherein the section of the image scanning area  
2    tagged as having a defect is ignored in cloning the target image to produce multiple  
3    target images over the image scanning area.
- 1    24.    The apparatus of claim 21, wherein the section of the image scanning area  
2    tagged as having a defect is ignored in enlarging the target image to fit across multiple  
3    image scanning areas.
- 1    25.    The apparatus of claim 20, further comprising means for smoothing over the  
2    section of the image scanning area tagged as having a defect if that section is  
3    determined to be included in the target image region.
- 1    26.    The apparatus of claim 14, wherein the defect calibration scan is a low  
2    resolution scan.
- 1    27.    The apparatus of claim 14, wherein the analyzer and the tag generator are  
2    included in the image scanning device.
- 1    28.    The apparatus of claim 16, wherein the memory is included in the image  
2    scanning device.

1    29.    The apparatus of claim 18, wherein the compensator is included in the image  
2    scanning device.

1    30.    The apparatus of claim 14, wherein at least one of the analyzer and the tag  
2    generator are included in a host computer connected to the image scanning device.

1    31.    The apparatus of claim 16, wherein the memory is included in a host computer  
2    connected to the image scanning device.

1    32.    The apparatus of claim 18, wherein the compensator is included in a host  
2    computer connected to the image scanning device.